

A NEW SPECIES OF *COREOCARPUS* (ASTERACEAE - COREOPSIDEAE)
FROM MÉXICO STATE, MÉXICO

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ABSTRACT

A new species, *Coreocarpus ixtapanus*, from the state of México, is described. It is closely related to *C. congregatus* (S.F. Blake) E.B. Smith of Sinaloa and Durango. Both of these taxa appear to be anomalous in *Coreocarpus*. The taxonomic implications of this anomaly are briefly discussed.

KEY WORDS: Asteraceae, Coreopsideae, *Coreocarpus*, México.

Routine identification of Mexican Asteraceae has revealed the following novelty.

Coreocarpus ixtapanus B. Turner, *sp. nov.*

Coreocarpo congregato (S.F. Blake) E.B. Smith similis sed plantis minoribus foliis ac capitulis minoribus, et antheris luteis (vs. purpureis) differt.

TYPE: MÉXICO. Estado México: Mpio. Tonatico, along Mexican hiway 55, a few mi S of Ixtapan de la Sal, ca. 1800 m, 14 Oct 1962, D.L. & M.L. Denham 172 (HOLOTYPE: COLO!).

Delicate slender annual 10-26 cm high. Stems terete, sparsely hirsute, more so at the nodes. Leaves opposite, 3-6 pairs to a stem, 8-15 mm long, 3-10 mm wide; petioles 1-2 mm long; blades mostly tripinnatisect, sometimes merely trilobate, sparsely hirsute with clear multiseptate hairs 0.5-1.5 mm long. Heads 1 or 2 to a stem, the peduncles mostly 2-3 cm long at maturity. Involucres ca. 6 cm high; outer herbaceous bracts 5-8 in a single series, 3-4 mm long, 0.5-0.8 mm wide; inner petaloid bracts yellow, 5-6 mm long, ca. 2 mm wide, the apices acute. Receptacular bracts linear-lanceolate, yellow, longer than the florets, the apices narrowly acute. Ray florets 5-8, yellow, 2-5 mm long, neuter, presumably sterile. Disk florets 7-10 per head, the corollas ca.

2.5 mm long, the throats ca. 0.8 mm long, sparsely glandular pubescent, the limb ca. 1.7 mm long. Anther sacs yellow with narrowly acute appendages. Style branches abruptly apiculate apically. Achenes (the outer series) broadly obovate, black, incurved, ca. 2.5 mm high, ca. 2 mm wide, the margins with a narrow somewhat corky wing, epappose.

The species is known only by the type sheet upon which are mounted 10 specimens; 9 of these are very delicate with rather minute heads, the remainder is ca. 26 cm high.

Coreocarpus iztapanus Turner is clearly related to *C. congregatus* (S.F. Blake) E.B. Smith, of Sinaloa and closely adjacent Durango, but the latter is a much more robust plant with larger leaves, larger heads with more numerous ray and disk florets, the anthers decidedly purple (vs. yellow).

Blake originally described *Coreocarpus congregatus* as belonging to the genus *Coreopsis*, but Smith (1989) transferred the species to *Coreocarpus* where it appears to be anomalous. Melchert (pers. comm.), who has exceptional familiarity with the genus *Bidens*, excludes it from the latter genus. As already noted, *Coreocarpus congregatus* and *Coreocarpus iztapanus* differ markedly from other species of *Coreocarpus* in possessing dimorphic involucre bracts, much as in *Bidens*; additionally, the ray florets of these two species are neuter, whereas those of the remaining taxa are pistillate. Smith (1989) positioned *Coreopsis congestus* in *Coreocarpus*, largely because of the incurved peripheral achenes, which resemble those of most taxa of *Coreocarpus*, but he also called attention to its resemblance to *Coreocarpus hintonii* Sherff and *Coreocarpus cronquistii* Sherff, both of which are positioned within *Bidens* by Melchert (cf. Melchert & Turner 1990). In short, *Coreocarpus congregatus* and *Coreocarpus iztapanus* appear to stand somewhere between *Coreocarpus* and *Bidens*, and both species might ultimately reside in their own genus, if not within an expanded *Bidens*.

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LITERATURE CITED

- Melchert, T. & B. Turner. 1990. New species, names and combinations in Mexican *Bidens* (Asteraceae: Coreopsidae). *Phytologia* 69:20-31.
- Smith, E.B. 1989. A biosystematic study and revision of the genus *Coreocarpus* (Compositae). *Syst. Bot.* 14:448-472.